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Remarks

Claims 1-19, 22-27, and 30-38 are pending. Claims 2-3 and 32-38 have been canceled without prejudice to their underlying subject matter. Claims 1, 17, 22-24, and 31 are amended. Favorable reconsideration of this application as amended is requested.

I. § 112 and § 101 Rejections

Claims 1, 17, 22-24, and 31 stand rejected under 35 USC § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards (or Applicants regard) as the invention. The Office Action stated that the RFID interrogation source, antenna, processor, and display lack structural relationship/cooperation with the other elements of the claims and therefore, it is unclear and confusing how these elements form a portable RFID reader for use in interrogating RFID tags.

In the Response to Arguments section of the Office Action regarding this rejection, the Examiner states that Applicants have referred to an affidavit or declaration filed in the parent application. Applicants disagree. Applicants believe the Examiner has confused an affidavit or declaration with incorporation by reference. Applicants have incorporated by reference a prior patent application in the present application, which is permissible under M.P.E.P 2163.07(b). M.P.E.P. 2163.07(b) states:

Instead of repeating some information contained in another document, an application may attempt to incorporate the content of another document or part thereof by reference to the document in the text of the specification. The information incorporated is as much a part of the application as filed as if the text were repeated in the application, and should be treated as part of the text of the application as filed.

In the Response faxed on December 15, 2003, Applicants submitted that in the specification on page 2, lines 13-16 it stated, "the contents of allowed copending U.S. application serial number 09/368,826, filed August 5, 1999, is incorporated herein by reference. That application describes a number of uses and configurations for such a portable RFID reader." This U.S. application that is incorporated by reference into the present application provides clear definiteness for the structural relationship/cooperation RFID interrogation source, antenna, processor, and display. Therefore, Applicants submit claims 1, 17, 22-24, and 31 are in compliance with 35 USC § 112, second paragraph, and that the rejection should be withdrawn.

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However, to help clarify the structural relationship/cooperation of the elements of the claim, Applicants have amended 1, 17, 22-24, and 31. Support for these amendments may be found throughout the application. Applicants submit no new matter is added. Therefore, Applicants submit that claims 1, 17, 22-24, and 31, as amended, are also in compliance with 35 USC § 112, second paragraph, and that the rejection should be withdrawn.

Applicants presume since there is no discussion anywhere in the Office Action about claims 23 and claims 31-33, being rejected under 35 USC § 102 or 103 that such claims, as amended, are now allowable.

Claims 34-38 were rejected under 35 USC § 101. Applicants disagree with this rejection. However, claims 34-38 have been cancelled without prejudice to its underlying subject matter, and as a result, the rejections against claims 34-38 will not be discussed.

II. § 102 Rejections

Claims 1-6, 28-30, and 34-38 stand rejected under 35 USC § 102(b) as being anticipated by US 5,640,002 (Ruppert et al.).

Independent claim 1 has been amended to recite a user interface in which a representation of an interrogation area is shown on the display as a first graphical component of the user interface, and an item of interest is shown on the display as a second graphical component of the user interface relative to the first graphical component to indicate a location within the interrogation area. Support for this amendment can be found throughout the in the specification, for example on page 4, lines 19-30, and claim 17.

Applicants point out that claim 17 is different than the combination of claims 1, 2, 3, as asserted by the Examiner on page 11 of the Office Action. For example, claim 17 includes a first graphical component and a second graphical component and that an item of interest is shown on the display as the second graphical component relative to the first graphical component to indicate a location within the interrogation area. An example of this type of user interface is illustrated in Figure 4 and described on page 4, lines 19-30 in the specification.

Applicants believe independent claim 1, as amended, is allowable over Ruppert et al. for at least the following reasons.

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Ruppert et al. does not disclose a user interface in which an interrogation area is shown on the display as a first graphical component and an item of interest is shown on the display as a second graphical component relative to the first graphical component to indicate a location within the interrogation area. None of the windows in the screen 12 of Ruppert et al. show a graphic of an interrogation area, nor do the windows show graphics associated with the item of interest. Ruppert et al. makes no mention whatsoever of illustrating an interrogation area on the display. Instead, Ruppert et al. discloses a user interface that displays menu choices, icons or both from which a user can indicate what action or function is desired. Such choices or icons are not about an item of interest or about an interrogation area. Instead, they are about assisting the user in operating the personal information device 298, such as to determine if the data processing mode is to be terminated (1442) or restoring the display (1444). (See Figure 26M.)

In contrast, two embodiments of the present invention are illustrated in Figure 4 and Figure 2, including a user interface in which at least one graphic associated with the item of interest may be presented on the display for observation by a user. For example, if the scanned area is a single book shelf, the first component of the user interface may be a longitudinal bar graphic such as that shown in Figure 4 at 110, and the second component may be a highlighted portion of the bar as shown at 112. If the scanned area consists of multiple book shelves, as shown in Figure 2, then the first component of the user interface may be a graphical representation of multiple book shelves as shown at 130, and the second component may be a highlighted portion 132 of that graphic. The display portion of the user interface for the RFID reader can include, for operations related to scanning the materials in a given area, a first (preferably graphical) component that illustrates the area or its boundaries, and a second (preferably graphical) component that illustrates a location within that area, such as where within that area a specified material is located, or should be located. Either or both of the components of the user interface may include characters (such as a letter or symbol (a "*", for example)) or graphics (such as a bar, a box, or a picture of a book), for example, or an illuminated or darkened portion of the display, or a flashing area, or the like.

Therefore, independent claim 1, as amended, recites elements not disclosed by Ruppert et al. and should now be allowable. Claims 2-6, which depend from claim 1, and add further

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limitations, should also be allowable. Applicants respectfully request Applicants respectfully request the rejection of claims 1-6 under 35 U.S.C. § 102(b) over Ruppert et al. be withdrawn.

Regarding claims 28-30, those claims were cancelled in the Response faxed on December 15, 2003. Regarding claims 34-38, these claims are cancelled in the present response. Therefore, the rejections against claims 28-30 and 34-38 are most and will not be discussed.

In conclusion, the rejection of claims 1-6, 28-30, and 34-38 under 35 USC § 102(b) as being anticipated by Ruppert et al. has been overcome and should be withdrawn.

Claims 1-2, 28-30, and 34-38 stand rejected under 35 USC § 102(e) as being anticipated by US 6,318,636 (Reynolds et al.).

As mentioned above, independent claim 1 has been amended to recite a user interface in which a representation of an interrogation area is shown on the display as a first graphical component of the user interface, and an item of interest is shown on the display as a second graphical component of the user interface relative to the first graphical component to indicate a location within the interrogation area. Also, as mentioned above, claim 17 is different than the combination of claims 1, 2, 3, as explained above.

Applicants believe independent claim 1, as amended, is allowable over Reynolds et al. for at least the following reasons.

Reynolds et al. does not does not disclose a user interface in which an interrogation area is shown on the display as a first graphical component and an item of interest is shown on the display as a second graphical component relative to the first graphical component to indicate a location within the interrogation area. Instead, the user interface of Reynolds et al. discloses two sets of light emitting diodes ("LEDs"), which related to either the RFID tag mode or symbol reading operating modes of the reader. That is, the RFID tag set 70 and the symbol related set 72 only indicate whether or not the RFID tag or symbol have been successfully read or not by the reader. For example, the yellow LED 80 in the RFID tag related set 70 flashes during the reading of one of the RFID tags, while the yellow LED 82 in the machine-readable symbol related set 72 flashed during the reading of one of the machine-readable symbols. When the reader successfully reads the RFID tag or machine-readable symbol, the green LED 76, 78 is illuminated, respectively. When the reader is unsuccessfully or incompletely operates, the red LED 84, 86 are illuminated, respectively. (See column 7, lines 43-67 of Reynolds et al.)

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Reynolds et al. also teaches over embodiments of the user interface, but all of them similarly indicate successful reading, reading or unsuccessful reading of the RFID tag or symbol. (See column 8, line 63 through column 9, line 16.) Therefore, the reader of Reynolds et al. does not include a user interface in which an interrogation area is shown on the display as a first graphical component and an item of interest is shown on the display as a second graphical component relative to the first graphical component to indicate a location within the interrogation area, as required by claim 1, as amended.

In contrast, as discussed above, two embodiments of the present invention are illustrated in Figure 4 and Figure 2, including a user interface in which at least one graphic associated with the item of interest may be presented on the display for observation by a user. For example, if the scanned area is a single book shelf, the first component of the user interface may be a longitudinal bur graphic such as that shown in Figure 4 at 110, and the second component may be a highlighted portion of the bar as shown at 112. If the scanned area consists of multiple book shelves, as shown in Figure 2, then the first component of the user interface may be a graphical representation of multiple book shelves as shown at 130, and the second component may be a highlighted portion 132 of that graphic.

Therefore, claim 1, as amended, recites elements not disclosed by Reynolds et al., and should be allowable. Claim 2, which depends from claim 1, and add further limitations, should also be allowable. Applicants respectfully request the rejection of claims 1-2 under 35 U.S.C. § 102(b) over Reynolds et al. be withdrawn.

Regarding claims 28-30, those claims were cancelled in the Response faxed on December 15, 2003. Regarding claims 34-38, these claims are cancelled in the present response. Therefore, the rejections against claims 28-30 and 34-38 are most and will not be discussed.

In conclusion, the rejection of claims 1-2, 28-30, and 34-38 under 35 USC § 102(e) as being anticipated by Reynolds et al. has been overcome and should be withdrawn.

III. § 103 Rejections

Claims 7-17, 24-25, and 28-30 stand rejected under 35 USC § 103(a) as being unpatentable over U.S. Pat. No. 5,640,002 (Ruppert et al.). Claims 7-16 all ultimately depend from claim 1, which allowable for reasons given in the above in Sections I and II. Therefore,

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claims 7-16. which depend from claim 1, and add further limitations, should also be allowable. Applicants respectfully request the rejection of claims 7-16 under 35 U.S.C. § 103(a) of Ruppert et al. be withdrawn.

In regards to claim 17, claim 17 recites "a user interface in which an interrogation area is shown on the display as a first graphical component of the user interface, and an item of interest is shown on the display as a second graphical component of the user interface relative to the first graphical component to indicate a location within the interrogation area. Applicants point out that claim 17 is different than the combination of claims 1, 2, 3, as asserted by the Examiner on page 11 of the Office Action. For example, claim 17 includes a first graphical component and a second graphical component and that an item of interest is shown on the display as the second graphical component relative to the first graphical component to indicate a location within the interrogation area. An example of this type of user interface is illustrated in Figure 4 and described on page 4, lines 19-30 in the specification. Applicants believe independent claim 17, is allowable over Ruppert et al. for at least the following reasons.

Ruppert et al. does not disclose a user interface in which an interrogation area is shown on the display as a first graphical component and an item of interest is shown on the display as a second graphical component relative to the first graphical component to indicate a location within the interrogation area. None of the windows in the screen 12 of Ruppert et al. show a graphic of an interrogation area, nor do the windows show graphics associated with the item of interest. Ruppert et al. makes no mention whatsoever of illustrating an interrogation area on the display. Instead, Ruppert et al. discloses a user interface that displays menu choices, icons or both from which a user can indicate what action or function is desired. Such choices or icons are not about an item of interest or about an interrogation area. Instead, they are about assisting the user in operating the personal information device 298, such as to determine if the data processing mode is to be terminated (1442) or restoring the display (1444). (See Figure 26M.)

In contrast, as discussed above, two embodiments of the present invention are illustrated in Figure 4 and Figure 2, including a user interface in which at least one graphic associated with the item of interest may be presented on the display for observation by a user. For example, if the scanned area is a single book shelf, the first component of the user interface may be a longitudinal bar graphic such as that shown in Figure 4 at 110, and the second component may be

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a highlighted portion of the bar as shown at 112. If the scanned area consists of multiple book shelves, as shown in Figure 2, then the first component of the user interface may be a graphical representation of multiple book shelves as shown at 130, and the second component may be a highlighted portion 132 of that graphic.

Therefore, independent claim 17 recites elements not shown, taught, or suggested by Ruppert et al. and should be allowable. Applicants respectfully request the rejection of claim 17 under 35 U.S.C. § 103(a) of Ruppert et al. be withdrawn.

In regard to claim 22, Applicants note again that the first sentence of section 12 of the Office Action does not list claim 22 as rejected. However, page 11 of the Office Action includes a discussion about the rejection of claim 22. Therefore, Applicants are proceeding under this assumption. Claim 22 has been amended to include a user interface in which an interrogation area is shown on the display as a first graphical component and an item of interest is shown on the display as a second graphical component relative to the first graphical component to indicate a location within the interrogation area. Support for this amendment can be found throughout the in the specification, for example on page 4, lines 19-30, and claim 17. Applicants believe independent claim 22, is allowable over Ruppert et al. for at least the following reasons.

First, Ruppert et al. does not disclose a user interface in which an interrogation area is shown on the display as a first graphical component and an item of interest is shown on the display as a second graphical component relative to the first graphical component to indicate a location within the interrogation area. None of the windows in the screen 12 of Ruppert et al. show a graphic of an interrogation area, nor do the windows show graphics associated with the item of interest. Ruppert et al. makes no mention whatsoever of illustrating an interrogation area on the display. Instead, Ruppert et al. discloses a user interface that displays menu choices, icons or both from which a user can indicate what action or function is desired. Such choices or icons are not about an item of interest or about an interrogation area. Instead, they are about assisting the user in operating the personal information device 298, such as to determine if the data processing mode is to be terminated (1442) or restoring the display (1444). (See Figure 26M.) In contrast, as discussed above, two embodiments of the present invention are illustrated in Figure 4 and Figure 2, including a user interface in which at least one graphic associated with the item of interest may be presented on the display for observation by a user. For example, if the

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scanned area is a single book shelf, the first component of the user interface may be a longitudinal bar graphic such as that shown in Figure 4 at 110, and the second component may be a highlighted portion of the bar as shown at 112. If the scanned area consists of multiple book shelves, as shown in Figure 2, then the first component of the user interface may be a graphical representation of multiple book shelves as shown at 130, and the second component may be a highlighted portion 132 of that graphic.

Second, Ruppert et al. does not show, teach or suggest an RFID tag associated with a predetermined location.

Third. Ruppert et al. does not show, teach or suggest a user interface producing an audio signal when the RFID reader interrogates the RFID tag associated with the predetermined location. Instead, Ruppert et al. teaches that if the read of a bar code was good, then there is a visible or audible indication of a good read. (See, Ruppert et al., column 60-64.) In fact, this audible indication of a good read is taught by Ruppert et al. only as it relates to bar codes, not as it relates to RFID tags. Ruppert et al. teaches that when RFID tags do not have a good read, a number of retries is attempted and then if the maximum numbers of retires has occurred, then block 1413 is performed to shut down the RFID tag reader. (See, Ruppert et al., column 29, lines 30-43.)

Therefore, it is not obvious, based on the teachings of Ruppert et al., to provide a user interface in which an interrogation area is shown on the display as a first graphical component and an item of interest is shown on the display as a second graphical component relative to the first graphical component to indicate a location within the interrogation area. In addition, Ruppert et al. does not disclose, teach or suggest a reader with an audible indication on an interrogated RFID tag, as asserted in the Office Action in section 12 regarding claims 7-11, which supposedly applies to claim 22. If anything, Ruppert et al. teaches away from such a combination. Therefore, independent claim 22 recites elements not shown, taught, or suggested by the cited reference and should be allowable. Applicants respectfully request the rejection of claim 22 under 35 U.S.C. § 103(a) of Ruppert et al. be withdrawn.

Claim 24 has been amended to include a user interface in which an interrogation area is shown on the display as a first graphical component and an item of interest is shown on the display as a second graphical component relative to the first graphical component to indicate a

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location within the interrogation area. Support for this amendment can be found throughout the in the specification, for example on page 4, lines 19-30, and claim 17. Applicants believe independent claim 24, is allowable over Ruppert et al. for at least the following reasons.

First, Ruppert et al. does not disclose a user interface in which an interrogation area is shown on the display as a first graphical component and an item of interest is shown on the display as a second graphical component relative to the first graphical component to indicate a location within the interrogation area. None of the windows in the screen 12 of Ruppert et al. show a graphic of an interrogation area, nor do the windows show graphics associated with the item of interest. Ruppert et al. makes no mention whatsoever of illustrating an interrogation area on the display Instead, Ruppert et al. discloses a user interface that displays menu choices, icons or both from which a user can indicate what action or function is desired. Such choices or icons are not about an item of interest or about an interrogation area. Instead, they are about assisting the user in operating the personal information device 298, such as to determine if the data processing mode is to be terminated (1442) or restoring the display (1444). (See Figure 26M.) In contrast, as discussed above, two embodiments of the present invention are illustrated in Figure 4 and Figure 2, including a user interface in which at least one graphic associated with the item of interest may be presented on the display for observation by a user. For example, if the scanned area is a single book shelf, the first component of the user interface may be a longitudinal bur graphic such as that shown in Figure 4 at 110, and the second component may be a highlighted portion of the bar as shown at 112. If the scanned area consists of multiple book shelves, as shown in Figure 2, then the first component of the user interface may be a graphical representation of multiple book shelves as shown at 130, and the second component may be a highlighted portion 132 of that graphic.

Second, the rejection of claim 24 in the Office Action relies on the arguments made in relationship to claim 13 and 14, which relied on the teachings of column 27, lines 60-64 of Ruppert et al. As mentioned above, in this section Ruppert et al. teaches that if the read of a bar code was good, then there is a visible or audible indication of a good read. In fact, this visible indication of a good read is taught by Ruppert et al. only as it relates to bar codes, not as it relates to RFID tags. Ruppert et al. teaches that when RFID tags do not have a good read, a number of retries is attempted and then if the maximum numbers of retires has occurred, then block 1413 is

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performed to shut down the RFID tag reader. (See, Ruppert et al., column 29, lines 30-43.) Therefore, it is not obvious, based on the teachings of Ruppert et al., to provide a visible indication on an interrogated RFID tag, as asserted in the Office Action. If anything, Ruppert et al. teaches away from such a combination.

Therefore, independent claim 24 recites elements not shown, taught, or suggested by the cited reference and should be allowable. Claim 25, which depends from claim 24 and adds more limitations, is likewise allowable. Applicants respectfully request the rejection of claims 24 and 25 under 35 U.S.C. § 103(a) of Ruppert et al. be withdrawn.

Claims 28-30 have been cancelled without prejudice to its underlying subject matter, and as a result, the rejections against claims 28-30 will not be discussed.

In conclusion, the rejection of claims 7-17 and 22, 24-25 under 35 USC § 103(a) has been overcome and should be withdrawn.

Claims 18-21 and 26-27 stands rejected under 35 USC § 103(a) as being unpatentable over US 5,640,002 (Ruppert et al.) in view of US 6,318,636 (Reynolds et al.).

Claims 18-19 depend from claim 17, which is allowable for the reasons given above. Therefore, claims 18-19, which add more limitations, is likewise allowable. Moreover, neither Ruppert et al. or Reynolds et al. show, teach or suggest a first graphical component as a bar, where the bar represents an interrogation area, or a second graphical component as a portion of the bar, where the portion of the bar represents an item of interest, as recited in claim 18. Therefore, claim 18 recites elements not shown, taught, or suggested by the cited reference and should be allowable. Applicants respectfully request the rejection of claims 18 and 19 under 35 U.S.C. § 103(a) of Ruppert et al. over Reynolds be withdrawn.

Claims 20-21 have been cancelled without prejudice to its underlying subject matter, and as a result, the rejections against claims 20-21 will not be discussed.

Claims 26-27 depend from claim 24, which is allowable for the reasons given above. Therefore, claims 26-27, which add more limitations, is likewise allowable. Moreover, neither Ruppert et al. or Reynolds et al. show, teach or suggest a reader where at least one light remains illuminated while RFID tags are being interrogated, and at least one other light is illuminated only when an RFID tag associated with an item meeting a predetermined criterion is illuminated, as recited in claim 26. Lastly, neither Ruppert et al. or Reynolds et al. show, teach or suggest a

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reader, where the user interface includes more than one light, and the lights are illuminated sequentially as the RFID reader approaches a desired location or material of interest, as recited in claim 27. Therefore, claims 26 and 27 recite elements not shown, taught, or suggested by the cited reference and should be allowable. Applicants respectfully request the rejection of claims 26 and 27 under 35 U.S.C. § 103(a) of Ruppert et al. over Reynolds be withdrawn.

In conclusion, the rejection of claims 18-19 and 26-27 under 35 USC § 103(a) as being unpatentable over Ruppert et al. has been overcome and should be withdrawn.

Withdrawal of the outstanding rejections and allowance of the pending claims is respectfully requested. Reconsideration of the application is requested. If a telephonic conference would be helpful in resolving any outstanding matters in the present application, the Examiner is encouraged to contact applicants' undersigned representative.

Respectfully submitted,

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